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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/610,461	07/05/2000	Juha Ojanpera	460-009524-US(PAR)	4189

2512 7590 08/26/2003

PERMAN & GREEN  
425 POST ROAD  
FAIRFIELD, CT 06824

EXAMINER

OPSASNICK, MICHAEL N

ART UNIT	PAPER NUMBER
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2655

DATE MAILED: 08/26/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/610,461

Applicant(s)

OJANPERA, JUHA

Examiner

Michael N. Opsasnick

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al (5819212) in view of Yasunaga et al (6453288).

As per claims 1,21,27,30, and 38, Matsumoto et al (5819212) teaches coding a audio signal:

“examining a part of the audio signal.....to be coded.....producing a set of predicted.....pitch predictor orders” as LPC analysis, Fig. 1, subblock 130

“determining a coding efficiency....using the determined coding efficiency.....to be coded....by using information....audio signal to be coded” as band splitting and coding at different rates (fig. 5, col. 10 lines 19-65) and V/UV decisions based on the input signal (col. 11 lines 1-24).

Matsumoto et al (5819212) does not explicitly teach using the determined coding efficiency to select a pitch predictor order for the selected coding method, however, Yasunaga et al (6453288) teaches selecting the pitch predictor order according to the coding mode (col. 15 lines 1-10; abstract). Therefore, it would have been obvious to one of ordinary skill in the art of audio coding to modify the teachings of Matsumoto et al (5819212) with using the determined coding efficiency to select a pitch predictor order for the selected coding method because it would effectively require less memory storage (to store for all possible coding modes) compared to coding according to the mode required (col. 3 line 55 – col. 4 line 13).

As per claim 2, Matsumoto et al (5819212) teaches predictive coding (Fig. 1, subblock 130)

As per claims 3,29,32,36,37, and 39, Matsumoto et al (5819212) teaches prediction based on input audio (Fig. 1, subblock 130)

As per claims 4,22,28,31, Matsumoto et al (5819212) teaches CELP based encoding using error calculations (col. 10 lines 59-65)

As per claims 5-13,23,35, Matsumoto et al (5819212) teaches the calculation of distortion errors based on frequency information and coding efficiency (col. 20 lines 20-45)

As per claim 14, Matsumoto et al (5819212) teaches MDCT (col. 18 lines 23-50)

As per claims 15,24,33, and 34, Matsumoto et al (5819212) teaches data order, lag, pitch predictor coefficients, and error information (col. 18, lines 20-65)

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As per claims 16,17, and 25, Matsumoto et al (5819212) teaches input speech frames (Fig. 6a,b, and c)

As per claims 18,19, Matsumoto et al (5819212) teaches a least squares method, and the coding error derived from the predictive error (col. 20 lines 15-58).

As per claims 20,26, Matsumoto et al (5819212) teaches a transmitting device (col. 1 lines 1-15)

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-39 have been considered but are moot in view of the new ground(s) of rejection.

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***Conclusion***

**4. Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 872 9314,

(for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

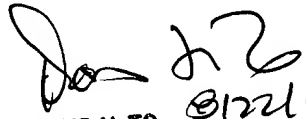
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Opsasnick, telephone number (703)305-4089, who is available Tuesday-Thursday, 9AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Doris To, can be reached at (703)305-4827. The facsimile phone number for this group is (703)872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (703) 305-4750, the 2600 Customer Service telephone number is (703) 306-0377.

mno

8/15/03

  
DORIS H. TO 8/12/03  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600